Precambrian Research 214-215 (2012) iv–v

Contents lists available at ScienceDirect

Precambrian Research

journal homepage: www.elsevier.com/locate/precamres

# Contents

**Special Issue**
**An indepth look into the dynamics of Precambrian volcanic and sedimentary terranes: in memory of Wulf U. Mueller**

**Guest Editors:**
**Patricia L. Corcoran, Réal Daigneault, Phillips C. Thurston**

An in-depth look into the dynamics of Precambrian volcanic and sedimentary terranes
P.L. Corcoran, R. Daigneault and P.C. Thurston ..... vi

Timing and characteristics of the Archean subaqueous Blake River Megacaldera Complex, Abitibi greenstone belt, Canada
W.U. Mueller, R. Friedman, R. Daigneault, L. Moore and J. Mortensen ..... 1

Detrital zircon age structure within ca. 3 Ga metasedimentary rocks, Yilgarn Craton: Elucidation of Hadean source terranes by principal component analysis
E.R. Thern and D.R. Nelson ..... 28

In situ hydroclastic fragmentation of subaqueous ponded lavas; New Senator caldera, Abitibi greenstone belt, Quebec, Canada
L.N. Moore, W.U. Mueller and R. Daigneault ..... 44

The volcano-sedimentary succession of the Archean Sodium Group, Ventersdorp Supergroup, South Africa: Volcanology, sedimentology and geochemistry
W. Altermann and N. Lenhardt ..... 60

Volcanism of the Palaeoproterozoic Bushveld Large Igneous Province: The Rooiberg Group, Kaapvaal Craton, South Africa
N. Lenhardt and P.G. Eriksson ..... 82

Early Paleoproterozoic rift volcanism in the eastern Fennoscandian Shield related to the breakup of the Kenorland supercontinent
K. Strand and J. Köykkä ..... 95

Nature of and controls on volcanism in the ca. 2.32-2.06 Ga Pretoria Group, Transvaal Supergroup, Kaapvaal Craton, South Africa
N. Lenhardt, P.G. Eriksson, O. Catuneanu and A.J. Bumby ..... 106

Geochemistry of ultramafic rocks and hornblendite veins in the Fiskenæsset layered anorthosite complex, SW Greenland: Evidence for hydrous upper mantle in the Archean
A. Polat, B.J. Fryer, I.M. Samson, C. Weisener, P.W.U. Appel, R. Frei and B.F. Windley ..... 124

Constraints on deposition in the Trans-Adirondack Basin, Northern New York: Composition and origin of the Popple Hill Gneiss
J.R. Chiarenzelli, M.R. Hudson, P.S. Dahl and W.D. deLorraine ..... 154

A Neoproterozoic continental rift succession: The volcano-sedimentary Koivib Mountains deposits of Namibia
C. Pilote, P.L. Corcoran and W.U. Mueller ..... 172

3.2 Ga eolian deposits from the Moodies Group, Barberton Greenstone Belt, South Africa: Implications for the origin of first-cycle quartz sandstones
E.L. Simpson, K.A. Eriksson and W.U. Mueller ..... 185

Tectonic, sedimentary and metallogenic re-evaluation of basal strata in the Mesoproterozoic Bylot basins, Nunavut, Canada: Are unconformity-type uranium concentrations a realistic expectation?
D.G.F. Long and E.C. Turner ..... 192

doi 0.1016/S0301-9268(12)00185-4

Precambrian Research 214-215 (2012) iv–v

Contents lists available at ScienceDirect

Precambrian Research

journal homepage: www.elsevier.com/locate/precamres

# Contents

**Special Issue**
**An indepth look into the dynamics of Precambrian volcanic and sedimentary terranes: in memory of Wulf U. Mueller**

**Guest Editors:**
**Patricia L. Corcoran, Réal Daigneault, Phillips C. Thurston**

An in-depth look into the dynamics of Precambrian volcanic and sedimentary terranes
P.L. Corcoran, R. Daigneault and P.C. Thurston ..... vi

Timing and characteristics of the Archean subaqueous Blake River Megacaldera Complex, Abitibi greenstone belt, Canada
W.U. Mueller, R. Friedman, R. Daigneault, L. Moore and J. Mortensen ..... 1

Detrital zircon age structure within ca. 3 Ga metasedimentary rocks, Yilgarn Craton: Elucidation of Hadean source terranes by principal component analysis
E.R. Thern and D.R. Nelson ..... 28

In situ hydroclastic fragmentation of subaqueous ponded lavas; New Senator caldera, Abitibi greenstone belt, Quebec, Canada
L.N. Moore, W.U. Mueller and R. Daigneault ..... 44

The volcano-sedimentary succession of the Archean Sodium Group, Ventersdorp Supergroup, South Africa: Volcanology, sedimentology and geochemistry
W. Altermann and N. Lenhardt ..... 60

Volcanism of the Palaeoproterozoic Bushveld Large Igneous Province: The Rooiberg Group, Kaapvaal Craton, South Africa
N. Lenhardt and P.G. Eriksson ..... 82

Early Paleoproterozoic rift volcanism in the eastern Fennoscandian Shield related to the breakup of the Kenorland supercontinent
K. Strand and J. Köykkä ..... 95

Nature of and controls on volcanism in the ca. 2.32-2.06 Ga Pretoria Group, Transvaal Supergroup, Kaapvaal Craton, South Africa
N. Lenhardt, P.G. Eriksson, O. Catuneanu and A.J. Bumby ..... 106

Geochemistry of ultramafic rocks and hornblendite veins in the Fiskenæsset layered anorthosite complex, SW Greenland: Evidence for hydrous upper mantle in the Archean
A. Polat, B.J. Fryer, I.M. Samson, C. Weisener, P.W.U. Appel, R. Frei and B.F. Windley ..... 124

Constraints on deposition in the Trans-Adirondack Basin, Northern New York: Composition and origin of the Popple Hill Gneiss
J.R. Chiarenzelli, M.R. Hudson, P.S. Dahl and W.D. deLorraine ..... 154

A Neoproterozoic continental rift succession: The volcano-sedimentary Koivib Mountains deposits of Namibia
C. Pilote, P.L. Corcoran and W.U. Mueller ..... 172

3.2 Ga eolian deposits from the Moodies Group, Barberton Greenstone Belt, South Africa: Implications for the origin of first-cycle quartz sandstones
E.L. Simpson, K.A. Eriksson and W.U. Mueller ..... 185

Tectonic, sedimentary and metallogenic re-evaluation of basal strata in the Mesoproterozoic Bylot basins, Nunavut, Canada: Are unconformity-type uranium concentrations a realistic expectation?
D.G.F. Long and E.C. Turner ..... 192

doi 0.1016/S0301-9268(12)00185-4

Stratigraphic architecture of the Sonia Fluvial interval, India in its Precambrian context
S. Sarkar, P. Samanta, S. Mukhopadhyay and P.K. Bose ..... 210

Archean cherts in banded iron formation: Insight into Neoarchean ocean chemistry and depositional processes
P.C. Thurston, B.S. Kamber and M. Whitehouse ..... 227

Ion microprobe analyses of $\delta^{18}O$ in early quartz cements from 1.9 Ga granular iron formations (GIFs): A pilot study
L.C. Cunningham, F.Z. Page, B.M. Simonson, R. Kozdon and J.W. Valley ..... 258

The radiogenic isotope characteristics of dikes and sills associated with the Mesoproterozoic Midcontinent Rift near Thunder Bay, Ontario, Canada
P. Hollings, M. Smyk and B. Cousens ..... 269